

SOME AQUATIC HEMIPTERA FROM WESTERN AUSTRALIA.

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(Contribution from South Australian Museum.)

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Mr. M. E. Solomon, of the Department of Biology at the University of Western Australia, has submitted for identification a small series of aquatic bugs collected by him in his State. Included is a single specimen of a most elusive Australian Notonectid.

I am indebted to Mr. Solomon for the opportunity of examining this material.

Family CORIXIDAE.

AGRAPTOCORIXA EURYNOME (Kirkaldy).

Corixa eurynome Kirk., Ann. Mag. Nat. Hist. (6), xx, 1897, p. 54.

Porocorixa eurynome Hale, Rec. S. Austr. Mus., ii, 1922, p. 318, fig. 343.

Agraptocorixa eurynome Lundblad, Arkiv. för Zool., xxA, No. 6, 1928, p. 3, fig. 1-5.

This species was not previously known from Western Australia, although another member of the genus, *A. parvipunctata* (Hale), was taken by Dr. Mjöberg in the Kimberley district.

Loc.—Butler's Swamp, Claremont (June 24 and August 19, 1934).

MICRONECTA ROBUSTA Hale.

Micronecta robusta Hale, Rec. S. Austr. Mus., ii, 1922, p. 325, fig. 347.

Loc.—Butler's Swamp, Claremont (July 29, 1934).

Family NOTONECTIDAE.

ANISOPS DORIS Kirkaldy.

Anisops doris Kirk., Wien. Ent. Zeit., xxiii, 1904, p. 112; Hale, Rec. S. Austr. Mus., ii, 1923, p. 402, fig. 364.

A species not before taken in Western Australia.

Loc.—Butler's Swamp, Claremont (July 29 and August 19, 1934); Hovea (Jan. 23, 1934).

ANISOPS HYPERION Kirkaldy.

Anisops hyperion Kirk., Wien. Ent. Zeit., xvii, 1898, p. 141, and xxiii, 1904, p. 113 (part ?); Hale, Rec. S. Austr. Mus., ii, 1923, p. 403, text fig. 365 and pl. x, fig. 2-4 and pl. xi, fig. 1-10.

Loc.—Butler's Swamp, Claremont (June 24, July 29 and August 19, 1934).

NOTONECTA (ENITHARONECTA) HANDLIRSCHI Kirkaldy.

Notonecta handlirschi Kirk., Trans. Ent. Soc., London, 1897, p. 408, and Wien. Ent. Zeit., xxiii, 1904, p. 132; Hale, Rec. S. Austr. Mus., ii, 1923, p. 418; Hutchinson, Ann. S. African Mus., xxv, 1929, p. 363.

Notonecta (Enitharonecta) handlirschi Hungerford, Ann. Ent. Soc., America, xxi, 1928, p. 143, pl. ix, fig. 6, and Bull. Univ. Kansas, xxi, 1933, p. 27, pl. iv, fig. 2, viii, fig. 4, and ix, fig. 7.

This species was previously known only from three males, two in the Vienna Museum and one, known to have been taken in Western Australia, in the British Museum. Mr. Solomon now submits a single female and, despite searching, has found no further specimens of the species.

The length of this female is 10.75 mm., and the width of the pronotum 3.8 mm. The colour is as described and figured by Hungerford (1933), the hemelytra being nearly black and the clavus very dark reddish-brown. The keel of the abdomen is not bare on any of the sternites and the last sternite is slender and elongate, slightly constricted and with the tip narrowly rounded (fig. 1, A).

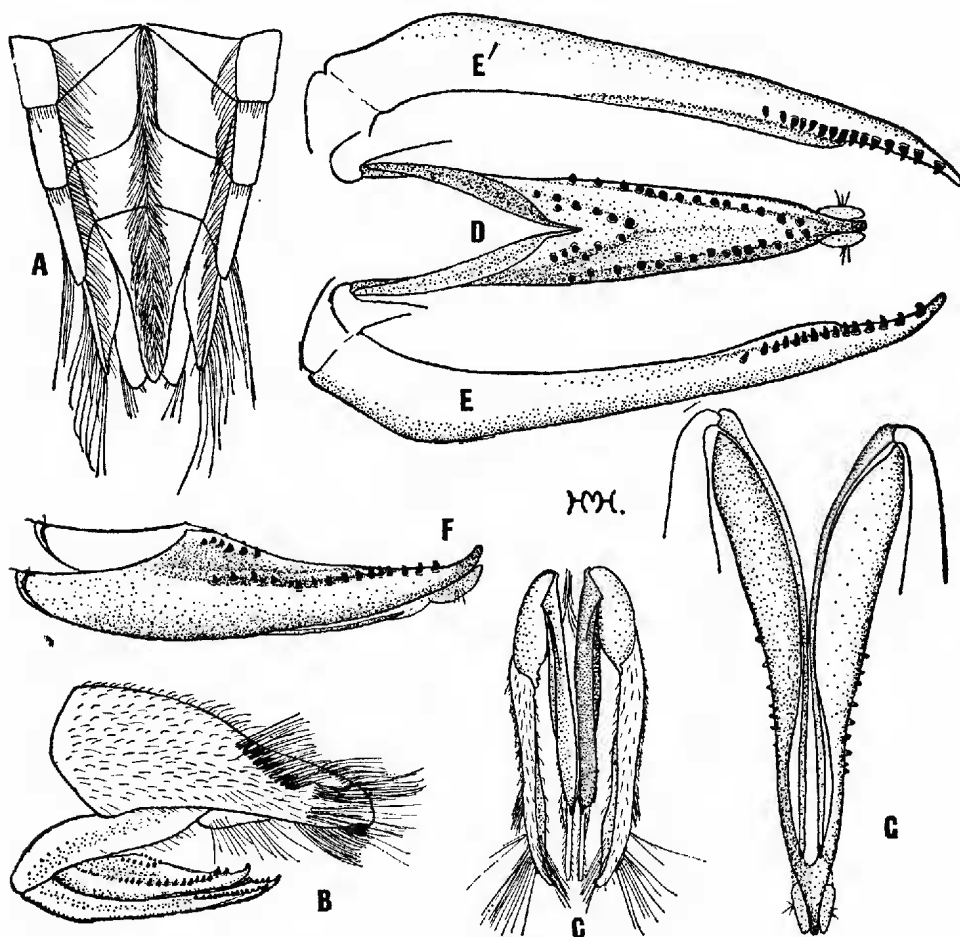


Fig. 1.

Female of *Notonecta handlirschi* Kirk. A, ventral view of abdomen (x 11); B, lateral and, C, anterior (ventral) view of last tergite and ovipositor (x 15); D-G, the three separate gouging components of ovipositor (all x 40); D, posterior face of middle piece and E-E', left and right side pieces, slightly tilted so that the view is postero-lateral; F, lateral and, G, anterior aspects of median component; in G it is slightly flattened and distorted.

The ovipositor is of unusual interest, as it is extraordinarily developed for the insertion of the eggs into plant tissues. The gouging apparatus is complex, consisting of a middle highly chitinized part with strong teeth on the posterior—or when flexed dorsal—face, and with a pair of subapical oval sensory bodies (fig. 1, D, F, G). On each side of this median structure and in contact with it antero-laterally, is a narrow scraper (1.87 mm. in length) slightly curved and with

a row of strong teeth on the apical third. Although the lateral components are closely attached to the middle piece by tissue, they can be separated quite readily.

Loc.—Hovea (Jan. 28, 1934).

Family PLEIDAE.

PLEA BRUNNI Kirkaldy.

Plea brunni Kirk., Wien. Ent. Zeit., xvii, 1898, p. 141 and xxiii, 1904, p. 128; Hale, Rec. S. Austr. Mus., ii, 1923, p. 421, fig. 371; Lundblad, Arch. Hydrobiol., Stuttgart Suppl. 12, 1933, p. 142, fig. 47.

Plea australis Horvath, Ann. Mus. Nat. Hungarici, xvi, 1918, p. 145.

The specimen figured by me (*ut supra*) is from Gladstone, Queensland, not far from the type locality; this and other specimens on which my description of the species was based have metathoracic wings and the hemelytra not aborted. However, a *Plea* was collected by me at Myponga Swamps in 1923, when the above-mentioned paper was in press, and this locality was added to those listed. In 1933 Lundblad pointed out (*loc. cit.*, p. 144, fig. 48) that these Myponga examples, some of which I had sent him, lacked claval suture and metathoracic wings and could be separated readily from *P. brunni*; he proposes the name *P. halei* for this Myponga form, which I have seen from nowhere else.

Loc.—Butler's Swamp, Claremont (July 29, 1934).

Family MESOVELIIDAE.

MESOVELIA HUNGERFORDI Hale.

Mesovelvia hungerfordi Hale, Rec. S. Austr. Mus., iii, 1926, p. 198, fig. 82.

Not previously recorded from Western Australia, but no doubt quite common in that State.

Loc.—Butler's Swamp, Claremont (June 24, July 29 and Aug. 19, 1934).

Family VELIIDAE.

MICROVELIA PERAMOENA Hale.

Microvelvia peramoena Hale, Archiv. f. Zool., K. Svenska Vet.-Akad., xviiA, 1925, p. 8, fig. 5, and Rec. S. Austr. Mus., iii, 1926, p. 213, fig. 88.

Loc.—Hovea (Jan. 23, 1934).

HALOVELIA MARITIMA Bergroth.

Halovelvia maritima Berg., Ent. Month Mag., xxix, 1893, p. 277; Hale, Rec. S. Austr. Mus., iii, 1926, p. 203, fig. 84, a-c; Esaki, Ann. Mus. Nat. Hungarici, xxiii, 1926, p. 162.

This little water-strider was found in Western Australia by the late Mr. A. M. Lea nearly forty years ago; his specimens were taken at Pelsart Island. Mr. Solomon has now secured examples considerably further south.

Loc.—North-west end of Garden Island, off Fremantle; on a sheltered rock-pool (March 11, 1933).